

REMARKS

Claim Rejections - 35 U.S.C. § 102

The Examiner has rejected claims 1, 2, 8, 11 and 12 under 35 USC 102(e) as being anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Aoki et al. (U.S. Patent No. 6,387,190). The Applicant respectfully traverses. It is the Applicant's understanding that the cited reference does not teach all of the elements of the Applicant's claims. In particular, Aoki does not teach the element of independent claims 1 and 11 of "polishing the metal with a slurry that includes an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, diopase, brass, fluorite, and azurite." In contrast, Aoki teaches a slurry containing alumina as an abrasive, an oxidizer such as hydrogen peroxide or iron nitrate, and optionally containing potassium or iron. Therefore, the Applicant respectfully submits that Aoki does not anticipate or make obvious the Applicant's claims 1 and 11 and dependent claims 2, 8, and 12 that incorporate the elements of the independent claims.

Claim Rejections - 35 U.S.C. § 103

Claim 3 is rejected under 35 USC 103(a) as being unpatentable over Aoki et al. ('190). The Applicant respectfully traverses. It is the Applicant's understanding that the cited reference does not teach or render obvious the Applicant's invention as claimed in independent claim 1 from which claim 3 depends, as described above. Therefore, because claim 3 depends on claim 1 and incorporates the elements of claim 1, claim 3 is not obvious in light of Aoki.

Claims 24 and 25 are rejected under 35 USC 103(a) as being unpatentable over Aoki et al. ('190) in view of admitted prior art. The Applicant respectfully traverses. It is the Applicant's understanding that the cited references do not teach or render obvious the Applicant's invention as claimed in independent claim 11 from which claims 24 and 25 depend. In particular, Aoki in view of admitted prior art does not teach the element of independent claims 1 and 11 of "polishing the metal with a slurry that includes an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, diopase, brass, fluorite, and azurite." In contrast, Aoki teaches a slurry containing alumina as an abrasive, an oxidizer such as hydrogen peroxide or iron nitrate, and optionally containing potassium or iron. The admitted prior art on page 3 of the specification refers to a damascene structure. Therefore, the Applicant respectfully submits that because claims 24 and 25 depend on claim 11 and incorporate the elements of claim 11, claims 24 and 25 are not obvious in light of Aoki.

Claims 1, 2, 4-8, 10-12, and 14 are rejected under 35 USC 103(a) as being unpatentable over Avanzino et al. (U.S. Patent No. 6,140,239) in view of Aoki et al. ('190). The Applicant respectfully traverses. It is the Applicant's understanding that the cited reference does not teach or render obvious the Applicant's invention as claimed in independent claims 1 and 11. In particular, neither Aoki nor Avanzino teach the element of independent claims 1 and 11 of "polishing the metal with a slurry that includes an abrasive harder than the metal and less hard than the barrier and wherein said abrasive comprises one or more materials selected from the group consisting of strontium titanate, apatite, diopase, brass, fluorite, and azurite." In contrast, Aoki teaches a slurry containing alumina as an abrasive, an oxidizer such as hydrogen peroxide or iron nitrate, and optionally containing

potassium or iron. Avanzino teaches a slurry containing iron oxide as the abrasive.

Therefore, the Applicant respectfully submits that because claims 2,4-8 and 10 depend on claim 1 and therefore incorporate the limitations of claims 1, claims 2,4-8 and 10 are not obvious in light of Avanzino in view of Aoki. Likewise, because claims 12 and 14 depend on claim 11 and incorporate its limitations, claims 12 and 14 are not obvious in light of Avanzino in view of Aoki.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

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